ORIGINAL ARTICLE

Readiness for Interprofessional Collaboration: Attitudes of Lithuanian Community Nurses and Family Physicians

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ABSTRACT

Background: The hierarchical pattern of collaboration between nurses and physicians that prevailed before Lithuanian primary health care reform strengthens the need to investigate the attitudes to autonomy in the nurse's profession. The aim of the survey was to evaluate and compare the attitudes of family physicians and community nurses to mutual collaboration and the autonomy of nurses in daily practice.
Methods: The study was conducted by using valid and reliable instrument "*Jefferson Scale of Attitudes toward Physician-Nurse Collaboration"* in randomly selected PHC centres in Lithuania. In total, 224 questionnaires were distributed to family physicians and 237 to community nurses, with respective response rate of 73% and 76%. The total scores were measured on the instrument scale. The higher total scores reflected more positive attitudes regarding the physician-nurse collaboration.
Results: The mean total score (44.3±0.31) was significantly higher in the group of CNs, which reflects a more positive attitude of CNs towards the physician-nurse collaboration, as compared to that of FPs (42.9±0.34). Nurses who provide autonomous consultations scored higher vs. those who did not for "shared education and collaboration" (mean score 22.6 vs. 21.8) and "nurse autonomy" (9.2 vs. 8.7), $p<0.05$. Nurses scored significantly higher vs. physicians such factors as "shared education and collaboration" (22.2±0.17 vs. 21.3±0.19) and "caring vs. curing" (9.3±0.1 vs.8.8±0.11). Nurses and physicians scored "nurse's autonomy" (respectively 8.9±0.1 and 8.8±0.1) and "physician's authority" low (respectively 3.98±0.095 and 3.99±0.097), $p=0.9$.
Conclusions: FPs and CNs positively evaluate the nurse-physician collaboration, though nurses demonstrate a more positive attitude. CNs and FPs attitudes showed that recognition of the autonomy of the CN is more an exception than a rule in Lithuania even though 20 years of PHC reformation process have passed, which contradicts ethical principles of collaboration and team work underlying the PHC concept.
Keywords: Professional Autonomy, Relational Ethics, Primary Care, Interprofessional Collaboration, Health Care Team.

INTRODUCTION

Lithuania, the country which was presented as one with "strong primary care" in terms of diverse Primary Health Care (PHC) structure and service delivery process dimensions (1), after 20 years of PHC reformation process has to face both new challenges and to acknowledge long-term weaknesses. New challenges have a global context and correspond to the WHO goals, such as: (1) to reduce exclusion and social disparities in health care; (2) to organize health services around people's needs and expectations; (3) to integrate health care into all sectors (2). The weaknesses that have persisted for many years are associated with PHC workforce, including PHC profile, professional recognition and responsibilities, interprofessional relation and availability of autonomous nurse (1). Both old and new challenges have one thing in common: they may be achieved by developing a comprehensive, patient-centered and based on relational ethics- PHC team with its main providers - physicians and nurses. It is obvious that nurse in PHC team should not be taken for a health care provider who carries out commands given by physician and use her skills in the PHC context to a maximum extent. The nurse should play an autonomic role supported by the partnership of physician and other health care providers. PHC team in Lithuania (one of the low PHC experience country) is presented as a collaboration unit of the family physician (FP), the community nurse (CN), the psychiatrist, the mental care nurse, the midwife and the social worker as well as the dentist (3). It has been demonstrated, though, that in practice the PHC team basically consists of the FP and the CN, who collaborate together in taking care of patients on the FP's list, whereas administrative employees and social workers are mentioned just as potential team members (4,5).

In Lithuania diversification in the CN profession has been most inconsistent during the PHC reformation, in contrast to that in the FP profession, which developed in a consistent manner. The acknowledgement of the CN role is also debatable, and the existence of the hierarchical pattern in the collaboration between FPs and CNs provokes important questions, such as: "Are CNs presenting a new role, do they have an autonomy and feel supported by FPs, do they provide a more comprehensive care for patients, psychosocial and educational support and are ready themselves for interprofessional collaboration?" In Lithuania research into the issues has been scarce. One of the studies of professional socialization of nurses found that just one third of nurses agreed that nurses had a new role in practice; two thirds of respondents agreed that nurse's profession was downgraded by other medical professionals and was treated like an assisting role (5).

At present in Lithuania there are two models of collaboration between FPs and CNs. The first one is the hierarchical pattern traced back to the existence of USSR, the "post-soviet hierarchical" pattern, which is more common in the public sector, where the FP shares the consultation room with the CN and the CN is acting upon the physician's command (for example, the nurse helps with paperwork). The second model is "modern, based on partnership", which is more popular in the private sector, where the CN has been delegated more duties. In both models, CNs and FPs are supposed to provide PHC services based on the CN's and the FP's job descriptions, however the job descriptions are irrelevant and fail to differentiate between the two roles, furthermore, the description of the roles sometimes overlap. As a result, in Lithuania FPs are exposed to excessive workload, and the recent studies reflected extremely low involvement of CNs in the provision of comprehensive PHC services (mental health services, disease prevention) (6).

To sum it up, a more detailed assessment of collaboration between CNs and FPs is needed. Interdisciplinary studies have disclosed a wide range of aspects of collaboration, from the traditionally hierarchical physician-nurse relationship and their roles and functions, to interdisciplinary communication built on mutual respect, trust both in integrity and potential contribution of the team members, and the unique expertise that each member brings to the team (7). The aim of the present survey was to evaluate and compare the attitudes of family physicians and community nurses towards mutual collaboration and their recognition of the autonomy of the CN in daily practice.

METHODS

***Instrument*:** The study was performed by using "*Jefferson Scale of Attitudes toward Physician-Nurse Collaboration"* (JSAPNC) with the permission of the Jefferson Medical College (the USA). The scale was originally developed to measure attitudes towards nurses and nursing services (8). The instrument has undergone initial reliability and validity testing and is recommended for research on physician-nurse collaboration (9,10).

The English version of the scale was received, and for the accuracy of translation "back-translation" procedures were used to translate the scale into the Lithuanian language. The translation was compared with the original English version and the inconsistencies were corrected.

The 15 items in the scale were answered by using 4-point Likert-type scale from "strongly agree" to "strongly disagree". Higher total scores reflected more positive attitudes regarding the physician-nurse collaboration (11). A higher factor score for "*physicians' authority"* indicates rejection of the totally dominant role of physicians in aspects of patient care. A higher factor score for "*nurses' autonomy*" dimension indicates a higher support of the nurse's involvement in decisions about patient care and policy. A higher factor score for "*shared education and collaboration*" indicates a greater

orientation toward interdisciplinary education and interprofesssional collaboration. A higher factor score for "*caring as opposed to curing*" dimension indicates a more positive view of the nurse's contributions to psychosocial and educational aspects of patient care. There were some questions added to the questionnaire by the authors in order to investigate the respondents' sociodemographic characteristics and autonomy of the nurses (more detailed information is provided in the Results section and Table 1).

***Study design*:** The Bioetic centre of Lithuanian University of Health Sciences gave permission to anonymous survey of CNs and GPs that was performed in Kaunas region, the most central in Lithuania that is highly urbanized, with less than one fifth of residents living in rural areas. The population of Kaunas region constitutes almost 15% of the total population of Lithuania. Economic indicators (e.g. salary) in the region are equal to the average in Lithuania. There were 50 primary health care (PHC) centres – public or private- in the Kaunas region providing PHC services under contract with the National Health Insurance Fund in the fall of 2012. Public and private institutions working under contract with the National Health Insurance Fund provide free PHC services to all insured patients. In the total list of PHC institutions there were 18 large facilities with 5000 and more patients and 32 small settings with less than 5000 registered patients. 36 PHC institutions (12 large and 24 small) were randomly selected for this study. After inviting them to take part in the study 33 PHC facilities agreed (10 large and 23 small). The survey was performed in January – March of 2013. Each CN and GP working in selected PHC institutions were invited to take part in the study. All primary health care workers were informed that they did not have to fill out the questionnaire, and there will not be any negative consequences for those who decided not to participate. They also were informed in writing about the selection procedure, the purpose of the questionnaire and the planned publications. CNs and GPS were guaranteed the full confidentiality of their responses. Then anonymous questionnaires were distributed to 237 CNs and 224 GPs. A total of 180 questionnaires were collected from CNs (response rate 76%) and 165 - from GPs (response rate 73.7%). In total, the study involved 164 FPs and 180 CNs.

Statistical analysis: Statistical analysis was performed by using IBM SPSS Statistics 20. To compare the attitudes of respondents according to different characteristics (Table 1), several statistical methods were used: the Mann-Whitney test (for comparison of two independent samples) and the Kruskal-Wallis test (for comparison of three independent samples), since the normality of the samples was denied. Difference between the compared groups was considered statistically significant at $p<0.05$. The psychometric criteria of the instrument have been measured: Cronbach $\alpha=0.7$, for FPs – 0.709 and CNs – 0.677.

RESULTS

Sociodemographic characteristics: The characteristics were chosen based on the current features of PHC provision in Lithuania (Table 1). Majority of FPs and CNs represented public PHC centres, were aged 41-60 years old and had more then 11 years working experience. FPs were asked how many autonomous consultations they had and whether or not they shared the consultation room with the nurse. The same questions were presented to nurses, who were also asked if they performed autonomous consultations. One third of FPs and CNs stated that they shared the consultation room (the "post-soviet" model), and the number of autonomous consultations of patients provided by CNs was very low compared to that provided by FPs; just half of CNs agreed that they performed autonomous consultations of patients. There were 96 (44.5%) missing values in responding to the question "CNs perform more than ten autonomous consultations of patients per day".

The assessment of the attitudes of the respondents was done according to the total maximum score - 60 (CN 73.8%; FP 71.5%), and the answers differed by different factors (F): the maximum score in F1 "shared education and collaboration" was 28 (CN 79.3%; FP 76.1%), in F2 "caring vs. curing" 12 (CN 77.5%; FP 73.3%), in F3 "nurse autonomy" 12 (CN 74.2%; FP 73.3%), and in F4 "physician's authority" 8 (CN 49.8%; FP 49.9%). Overall, the most positive evaluation was received for F1 and the most negative for F4.

The total scores on JSAPNC were measured and compared between FPs and CNs (Table 2). The mean total score (44.3±0.31) was significantly higher in the group of CNs, which reflects a more positive attitude of CNs towards the physician-nurse collaboration, as compared to that of FPs (42.9±0.34). Also, nurses scored significantly higher vs. FPs such factors as "shared education and collaboration" (22.2±0.17 vs. 21.3±0.19) and "caring vs. curing" (9.3±0.1 vs.8.8±0.11). "Nurse's autonomy" and "physician's authority" were scored low and similarly by both groups of respondents.

Comparison of attitudes according to different factors: The attitudes of respondents were compared according to different characteristics presented in Table 1.

The attitudes of family physicians according to different characteristics are presented in Table 3. There were no significant findings according to different FPs characteristics.

The attitudes of nurses are presented in Table 4. Nurses who were more than 60 years old had a more positive attitude towards the factor "caring vs. curing" and were less positive towards the factor "physician's authority", as compared to nurses younger than 40 years old. Nurses who consulted autonomously 10 or more patients per day were more positive towards the factor "caring vs. curing", as compared to those who provided fewer

consultations. Nurses who did not share their consultation room with the physician were more positive towards the factor "shared education and collaboration", as compared to those who did. Nurses who provided autonomous consultations evaluated the physician-nurse collaboration more positively and were also more satisfied with the factor "shared education and collaboration" and "nurse autonomy", as compared to those who did not provide autonomous consultations ($p<0.05$).

Based upon results the main study findings are:

- FPs and CNs positively evaluate the nurse-physician collaboration, though nurses demonstrate a more positive attitude.
- "Physician's authority" and "Autonomy of nurses" have similar and low importance to FPs and CNs. Younger CNs less prefer "Physicians' authority" and CNs who provide autonomous consultations favor their autonomy.
- Nurses who are more autonomous in daily practice (those who do not share the room with the FP and those who perform autonomous consultations of patients) favor "shared education and collaboration".
- Low scores on "Caring vs. curing" reflect low involvement of nurses to the psychosocial and educational aspects of patients care.

Table 1. The main characteristics of respondents.

Characteristics	Family physicians n (%)	Community nurses n (%)
PHC centre type		
Public	96 (58.5)	105 (58.4)
Private	59 (36.0)	53 (29.4)
Missing	9 (5.5)	22 (12.2)
Age groups		
≤ 40 years old	35 (21.3)	50 (27.7)
41-60 years old	93 (56.7)	100 (55.6)
≥ 61 years old	27 (16.5)	16 (8.9)
Missing	9 (5.5)	14 (7.8)
Work experience		
≤ 5 years	16 (9.8)	19 (10.6)
6-10 years	43 (26.2)	8 (4.4)
≥ 11 years	100 (61.0)	139 (77.2)
Missing	5 (3.0)	14 (7.8)
The number of autonomous consultations of patients per day		
	< 20 patients: 28 (17.1) 20-29 patients: 82 (50.0) ≥ 30 patients: 51 (31.1)	1-4 patients: 20 (11.1) 5-9 patients: 28 (15.6) ≥ 10 patients: 29 (16.1)
Missing	3 (1.8)	103 (57.2)
The physician shares the same consultation room with the nurse		
Yes	59 (36.0)	59 (32.8)
No	101 (61.6)	114 (63.0)
Missing	4 (2.4)	7 (4.2)
The nurse performs autonomous consultations		
Yes	-	80 (48.8)
No	-	84 (51.2)
Missing	-	16
Total	**164 (100%)**	**180 (100%)**

Table 2. The comparison of mean total scores of community nurses and family physicians in four different factors (F1-F4) of the Jefferson Scale of Attitudes toward Physician-Nurse Collaboration

	Total score	F-1: Shared education and collaboration	F-2: Caring vs. curing	F-3: Nurses' autonomy	F-4: Physicians' authority
All respondents (n=335)					
Mean ± SE	43,6±0.23	21,8±0.13	9,0±0.10	8,9±0.10	3,99±0.07
Median (P_{25}, P_{75})	43 (41, 46)	22 (20, 23)	9 (8, 10)	9 (8, 9)	4 (3, 5)
Community nurses (n=173, (51.6%))					
Mean ± SE	44,3±0.31	22,2±0.17	9,3±0.10	8,9±0.10	3,98±0.095
Median (P_{25}, P_{75})	44 (42, 47)	22 (21, 24)	9 (8.5, 10)	9 (8, 9.5)	4 (3, 5)
Family physicians (n=162 (48.4%))					
Mean ± SE	42.9±0.34	21,3±0.19	8,8±0.11	8,8±0.10	3,99±0.097
Median (P_{25}, P_{75})	42,5 (40, 45)	21 (20, 23)	9 (8, 10)	9 (8, 9)	4 (3, 5)
Comparison between FPs and CNs (p)	***<0.001***	***<0.001***	***0.001***	*0.426*	*0.909*

SE – standard error of mean, P_{25}- 25th percentile, P_{75} -75th percentile.

Table 3. The attitudes of family physicians towards the physician-nurse collaboration according to different factors.

	Total score (Mean±SE)	F-1: Shared education and collaboration (Mean±SE)	F-2: Caring vs. curing (Mean±SE)	F-3: Autonomy of nurses (Mean±SE)	F-4: Physicians' authority (Mean±SE)
PHC centre type					
Private	43.2±0.60	21.6±0.32	8.6±0.18	8.9±0.17	4.0±0.18
Public	42.7±0.44	21.1±0.24	8.9±0.16	8.8±0.14	4.0±0.12
p	*0.819*	*0.282*	*0.465*	*0.666*	*0.892*
Age groups					
≤ 40 years old	42.9±0.69	21.5±0.43	8.7±0.23	8.6±0.21	4.0±0.21
41-60 years old	42.6±0.47	21.1±0.24	8.7±0.15	8.9±0.13	4.0±0.13
≥ 61 years old	43.9±0.83	21.8±0.54	9.0±0.29	9.1±0.28	4.0±0.28
p	*0.461*	*0.287*	*0.713*	*0.533*	*0.962*
Work experience					
≤ 5 years	41.9±1.06	21.0±0.63	8.4±0.22	8.6±0.41	3.8±0.21
6-10 years	43.3±0.68	21.8±0.39	8.9±0.26	8.7±0.20	3.8±0.18
≥ 11 years	42.9±0.44	21.1±0.23	8.8±0.14	8.9±0.13	4.1±0.13
p	*0.844*	*0.381*	*0.572*	*0.503*	*0.453*
Number of autonomous consultations of patients per day					
< 20 patients	43.5±1.05	21.7±0.53	8.8±0.29	8.8±0.32	4.1±0.28
20-29 patients	42.3±0.48	21.0±0.26	8.5±0.15	8.7±0.14	4.1±0.11
≥ 30 patients	43.5±0.50	21.6±0.31	9.1±0.21	9.1±0.16	3.7±0.19
p	*0.256*	*0.196*	*0.135*	*0.289*	*0.088*
The physician shares the same consultation room with the nurse					
Yes	42.5±0.51	21.0±0.28	8.7±0.20	8.8±0.16	4.0±0.12
No	43.0±0.46	21.4±0.25	8.8±0.14	8.8±0.14	4.0±0.14
p	*0.450*	*0.245*	*0.494*	*0.975*	*0.556*

Table 4. The attitudes of community nurses towards the physician-nurse collaboration according to different factors.

	Total score (Mean±SE)	F-1: Shared education and collaboration (Mean±SE)	F-2: Caring vs. curing (Mean±SE)	F-3: Autonomy of nurses (Mean±SE)	F-4: Physicians' authority (Mean±SE)
PHC centre type					
Private	44.7±0.54	22.5±0.28	9.1±0.16	9.0±0.16	4.4±0.15
Public	44.5±0.41	22.2±0.23	9.4±0.14	8.9±0.12	3.9±0.13
p	0.575	0.413	0.130	0.972	0.205
Age groups					
≤ 40 years old	43.8±0.57	22.1±0.34	8.7±0.19	8.8±0.15	4.1±0.17
41-60 years old	44.4±0.40	22.1±0.22	9.4±0.13	8.9±0.13	4.0±0.13
≥ 61 years old	45.9±1.04	23.3±0.55	9.9±0.33	9.5±0.34	3.3±0.28
p	0.383	0.083	**0.014***	0.311	**0.030***
Work experience					
≤ 5 years	44.0±0.75	22.3±0.45	9.0±0.25	8.6±0.28	4.2±0.23
6-10 years	44.5±0.73	22.9±0.67	9.0±0.27	9.1±0.23	3.5±0.42
≥ 11 years	44.4±0.37	22.2±0.20	9.3±0.12	9.0±0.11	4.0±0.11
p	0.669	0.516	0.483	0.307	0.437
Number of autonomous consultations of patients per day					
< 20 patients	44.5±0.50	22.4±0.33	9.0±0.22	8.9±0.20	4.4±0.33
20-29 patients	45.2±0.76	22.8±0.43	9.3±0.22	9.3±0.25	3.8±0.24
≥ 30 patients	45.6±0.89	22.7±0.44	9.8±0.34	9.2±0.26	3.9±0.26
p	0.442	0.743	**0.023***	0.606	0.466
The physician shares the same consultation room with the nurse					
Yes	43.8±0.52	21.7±0.29	9.4±0.16	8.8±0.17	4.0±0.18
No	44.9±0.39	22.6±0.22	9.3±0.14	9.1±0.11	4.0±0.12
p	0.051	**0.006**	0.996	0.104	0.820
The nurse performs autonomous consultations					
Yes	45.2±0.47	22.6±0.25	9.4±0.16	9.2±0.14	4.0±0.15
No	43.6±0.42	21.8±0.25	9.1±0.14	8.7±0.13	3.9±0.13
p	***0.004***	***0.033***	*0.065*	***0.025***	*0.803*

*statistical significant difference between the first and the third group

DISCUSSION

Sociodemographic characteristic features. There were selected particular respondents' characteristics which were specific to health system such as: PHC type, autonomous consultations, shared consultation room. The PHC service provision in the public PHC centres is different from that in the private PHS centres. In the public sector the old "post-soviet" tradition prevails as the FP shares the same consultation room with the CN, whereas in private PHC centres FPs consult patients without the assistance of CNs. Autonomous consultations by nurses are not routine in everyday practice**.**

The age of the respondents is also an exceptional characteristic. In view of the fact that the PHC reformation process has been going on for 20 years, differences in qualification of the PHC providers can most often be attributed to the difference in age. To illustrate, the post-residency background of CNs and FPs was only available in the recent years of the PHC reformation process. At the start of the reformation there were internists and pediatrists to be subsequently replaced by FPs, and nurses with family background to be replaced by CNs.

Nurses evaluate the physician-nurse collaboration better than FPs – is one of the findings of our study**.** This is in line with the findings of other surveys. It has been demonstrated that in countries with a more hierarchical model of professional roles (such as Italy, Mexico) nurses express less positive attitudes towards the physician-nurse collaboration, and these findings provide evidence in support of the socialization role theory; also it has been shown that nurses seek a collaborative physician-nurse relationship more than physicians, regardless of cultural differences (11). A different study also concluded that district nurses were slightly more positive about collaboration than FPs. A positive attitude towards collaboration did not seem to be part of the FPs' professional role to the same extent as it was for CNs (12).

Factors that have a negative effect on collaboration. The hierarchical relationship along with the authoritative status of the physician, acknowledgment that the nurse is "an assistant/helper "are among major factors that negatively affect the collaboration between FPs and CNs. Based on the findings of our survey, in Lithuania the authority of FPs seems to be present**.** The problem of hierarchy-based relations between FPs and CNs has been reported in other surveys undertaken in countries where the profession of the CN has a much longer history. In the USA, similar problems have been revealed inside the teams of FPs and CNs in terms of autonomy and interdependence: "nurses complained that FPs-CNs pairings in the context of team were hierarchical with responsibilities being delegated by more powerful member" (13). The existence of hierarchy has also been proved by some other surveys in Lithuania: "two thirds of nurses agreed that they are viewed as an assistance" (5), and it has been suggested that hierarchical atmosphere depends on the FP's age: "younger FPs tend to create an atmosphere for communicating in a team that has less hierarchy and involves more collaboration than older FPs do" (12). Problems in collaboration between FPs and CNs may also be associated with other factors, such as lack of interdisciplinary education and competencies, lack of familiarity with the scope of nurse practice" (14), lack of interprofesional (15). This was also emphasized in numerous surveys on the national and international levels (12,13).

Why should Lithuanian nurses have more autonomy? Findings of our survey showed that nurses with a higher level of autonomy evaluated collaboration more positively. Nurses who had a more autonomous involvement in everyday practice (those who did not share the room with the FP, who provided more autonomous consultations to patients) favored "shared education and collaboration". Other surveys have confirmed that advanced nursing is related to better quality of care, that "nurse practitioners with a higher clinical decision-making authority had greater outpatient clinical productivity and that some of the FP's functions may be successfully delegated to nurses" (16). In one study "High Resolution Nursing Consultation" (CIAR) was established to give nurses more autonomy in order to demonstrate the ability of nurses in providing spontaneous consultations; it was concluded that nurses are highly qualified for the management of spontaneous consultation with excellent results. Protocols are of great help in the resolution of nursing and the nursing improves with the experience acquired (17). The study in Canada showed that nurse practitioners, as compared to FPs, were underutilized in terms of curative and rehabilitative care, though NPs provided more services related to disease prevention and more supportive services (14). In Nova Scotia the effect of an enhanced collaborative care model was evaluated, which included team building and the addition of a nurse practitioner (NP) to the team, which resulted in the improvement of chronic disease management and demonstrated the beginning of better preventive care among all patients (18). Also autonomy is highly related with moral distress and dignity in nursing – one of the main ethical principles in CNs practice (19).

Another step is to find out the needs of Lithuanian nurses. The majority of nurses prefer to have more autonomy and an appropriate collaboration (5). Furthermore, nurses with a high level of independence at work better assessed their overall level of competence (20). Though career opportunities and innovative initiatives were the least important factors related to nursing work in Lithuania, it has been shown that the salary was the factor most tightly related to the professional activities, followed by social security, opportunity for self-realization, etc.; the survey data demonstrated that security of the family was the key value for Lithuanian nurses (21). These findings are not in line with studies conducted in other countries, where career opportunities, negative working atmosphere were emphasized as the most important factors for nurses. The importance of autonomy for

nurses was highlighted in several studies: “when nurses in home care felt that their autonomy was reduced, this strongly influenced their intention to leave the practice” (22).

What next steps should be recommended for implementation of a new role of the CN? Several factors will prepare nurses for this new role of partnering to advance health care, including advancing their formal education, developing leadership as a core competency, acquiring leadership (23). In order to support the development of collaborative practice skills among the health care workforce is needed, and a long-term intervention is necessary to make changes on the organisational level. Acquisition of relevant skills and knowledge on collaborative practice is not enough and does not guarantee that they would be transferred to the workplace (24). To sum up, changes in Lithuanian legislation should be introduced in order to clarify tasks and responsibilities of FPs and CNs, and this should be done on the basis of common consensus by politicians, administration staff, associations of CNs and FPs. The financial motivation of nurses seems to be most important, therefore, incentive payments (e.g., for autonomous consultations), and reward for performance results might be highly valuable. The recognition of the new CN’s status in an autonomous role in partnership with the FP may be increased through interdisciplinary education and a course on specific interprofessional collaboration given both to students and professionals “how to be ethical and to act ethically (25). Improvements in PHC teams should be encouraged because “the dysfunctional teams may be dangerous and, to avoid that, several recommendations were presented emphasizing the use of leadership strategies, reinforcement of shared values such as patient-centeredness, and development of a shared group identity” (26).

Based on the survey results we convey the key message to researchers, health policy makers and professionals saying that the PHC reformation process should duly incorporate all PHC team members in order to enhance their autonomy, new roles, recognition, and ethical - collaboration skills.

CONCLUSION

FPs and CNs positively evaluate the nurse-physician collaboration, though nurses demonstrate a more positive attitude. CNs and FPs attitudes showed that recognition of the autonomy of the CN is more an exception than a rule in Lithuania even though 20 years of PHC reformation process have passed, which contradicts the ethical principles of collaboration and team work underlying the PHC concept.

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REFERENCES

1. Kringos DS. The Strength of primary care in Europe (dissertation). Utrecht: Utrecht University; 2012.
2. WHO: primary health care goals. Available at: URL: http://www.who.int/topics/primary_health_care/en/.
3. Adoption of the concept of the development of primary health care; No V-717. Vilnius, Lithuania; 2007. Available at: URL: <http://sena.sam.lt/lt/main/teisine_informacija/ higienos_normos?id=52041>. Lith.
4. Jaruseviciene L, Liseckiene I, Valius L, Kontrimiene A, Jarusevicius G, Lapão LV. Teamwork in primary care: perspectives of general practitioners and community nurses in Lithuania. BMC Fam Pract 2013;15(14):118.
5. Jankauskiene Z, Kubiliene E, Juozulynas A, Venalis A. (Professional socialization of nurses ensuring practice activity). Medicina (Kaunas) 2010;46 (Suppl 1):16-6. Lith.
6. Obelienytė D. The evaluation of the correspondence of the community nurses activities described in the medical norm to their daily activitiesin public and private primary health care (PHC) institutions (masters thesis. Kaunas: Lithuania University of Health Sciences, Faculty of Public Health, Department of Health Management; 2012 .
7. Houldin AD, Naylor MD, Haller DG. Physician-nurse collaboration in research in the 21st century. J Clin Oncol 2004; 22(5):774-6.
8. Hojat M, Herman MW. Developing an instrument to measure attitudes toward nurses: preliminary psychometric findings. Psychol Rep 1985;56(2):571-9.
9. Ward J, Schaal M, Sullivan J, Bowen ME, Erdmann JB, Hojat M. The Jefferson scale of attitudes toward physician-nurse collaboration: a study with undergraduate nursing students. J Interprof Care 2008; 22(4):375-86.
10. Dougherty MB, Larson E. A review of instruments measuring nurse-physician collaboration. J Nurs Adm 2005; 35(5):244-53.
11. Hojat M, Gonnella JS, Nasca TJ, et al. Comparisons of American, Israeli, Italian and Mexican physicians and nurses onthe total and factor scores of the Jefferson scale of attitudes towardphysician-nurse collaborative relationships. Int J Nurs Stud 2003; 40(4):427-35.
12. Hansson A, Arvemo T, Marklund B, Gedda B, Mattsson B. Working together--primary care doctors' and nurses' attitudes to collaboration. Scand J Public Health 2010; 38(1):78-85.
13. Martin DR, O'Brien JL, Heyworth JA, Meyer NR. The collaborative healthcare team: tensive issues warranting ongoing consideration. J Am Acad Nurse Pract 2005; 17(8):325-30.

14. Way D, Jones L, Baskerville B, Busing N. Primary health care services provided by nurse practitioners and family physicians in shared practice. CMAJ 2001;165(9):1210-4.
15. Engel J, Prentice D. The ethics of interprofessional collaboration. Nurs Ethics 2013;20(4)::426-35.
16. Chumbler NR, Geller JM, Weier AW. The effects of clinical decision making on nurse practitioners' clinical productivity. Eval Health Prof 2000; 23(3):284-305.
17. Leal Negre M, Alvarado Montesdeoca C, Domenech Rodríguez C, Garijo Borja A, Moreiras López S. (Nursing consultation, high-resolution in primary care). Rev Enferm 2011; 34(9):32-9. Spanish.
18. Lawson B, Dicks D, Macdonald L, Burge F. Using quality indicators to evaluate the effect of implementing an enhanced collaborative care model among a community, primary healthcare practice population. Nurs Leadersh (Tor Ont) 2012; 25(3):28-42.
19. Burston AS, Tuckett AG. Moral distress in nursing: Contributing factors, outcomes and interventions. Nurs Ethics 2013; 20(3):312-24.
20. Istomina N, Suominen T, Razbadauskas A, Martinkėnas A, Meretoja R, Leino-Kilpi H. Competence of nurses and factors associated with it. Medicina (Kaunas) 2011;47(4):230-7.
21. Blazeviciene A, Novelskaite A. New and old professional groups in health care: formal re-definitions of the nursing profession and the internal qualities of professionals. Medicina (Kaunas). 2010;46 (Suppl 1):71-8.
22. Tummers LG, Groeneveld SM, Lankhaar M. Why do nurses intend to leave their organization? A large-scale analysis in long-term care. J Adv Nurs 2013;69(12):2826-38.
23. Strech S, Wyatt DA. Partnering to lead change: nurses' role in the redesign of health care. AORN J 2013; 98(3):260-6.
24. Macdonald CJ, Stodel EJ, Chambers LW. An online interprofessional learning resource for physicians, pharmacists, nurse practitioners, and nurses in long-term care: benefits, barriers, and lessons learned. Inform Health Soc Care 2008;33(1):21-38.
25. Ewashen C,McInnis-Perry, G, Murphy N. Interprofessional collaboration-in-practice: The contested place of ethics. Nurs Ethics 2013;20(3):325-35.
26. Mitchell R, Parker V, Giles M, Boyle B. The ABC of health care team dynamics: Understanding complex affective, behavioral, and cognitive dynamics in interprofessional teams. Health Care Manage Rev 2013 Jul 15. (Epub ahead of print).